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(54) Title: SOLUTION ADDITIVES FOR THE ATTENUATION OF PROTEIN AGGREGATION

(57) Abstract: In part, the present invention relates to a compound or polymer comprising a non-protein-binding moiety and at least one protein-binding group. The present invention relates to a method of screening compounds or polymers for the property of inhibiting protein aggregation in solution, a method of preparing a compound or polymer having the property of protein aggregation inhibition in solution, a method of classifying a compound or polymer as either inhibitory of protein aggregation in solution or not inhibitory of protein aggregation in solution, and to a method of determining the preferential binding coefficient,  $\Gamma_{XP}$ , of an additive in a protein solution. The present invention also relates to a method of suppressing or preventing aggregation of a protein in solution, a method of decreasing the toxicological risk associated with administering a protein to a mammal in need thereof, and a method of facilitating native folding of a recombinant protein in solution.



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